

CLAIMS:

1. A light-emitting panel, comprising:
a transparent substrate;
- 5 a plurality of electroluminescent elements on the surface of the transparent substrate; and
electrical supply means arranged between the electroluminescent elements, arranged so that an alternating voltage can be applied across each of the electroluminescent elements in a direction substantially parallel to the surface of the
10 transparent substrate.
2. A light-emitting panel as claimed in claim 1, wherein the electroluminescent elements are in the form of elongate strips of electroluminescent material.
- 15 3. A light-emitting panel as claimed in claim 1 or 2, wherein the electrical supply means comprises a plurality of dielectric elements located between the electroluminescent elements, and a plurality of conductive elements in contact with the dielectric elements.
- 20 4. A light-emitting panel as claimed in claim 3, further comprising an alternating voltage source connected to the conductive elements in such a way that the charge on adjacent dielectric elements oscillates and all of the electroluminescent elements are activated simultaneously.
- 25 5. A light-emitting panel as claimed in claim 3, further comprising an alternating voltage source connected to the conductive elements in pairs so that alternate electroluminescent elements are activated.
- 30 6. A light-emitting panel as claimed in claim 3, further comprising an alternating voltage source connected to the conductive elements in such a way that three or more

adjacent dielectric elements are raised to the same voltage, so that the spacing between activated electroluminescent elements is at least two.

7. A light-emitting panel as claimed in claim 3, further comprising an alternating voltage source connected to the conductive elements in such a way that adjacent electroluminescent elements are sequentially activated so as to give the impression that a light source moves along the panel.
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8. A light-emitting panel as claimed in any of claims 3 to 7, wherein each dielectric element extends at a proximal side to the surface of the transparent substrate at a gap between adjacent electroluminescent elements, and protrudes at a distal side further away from the substrate than the electroluminescent elements.
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9. A light-emitting panel as claimed in claim 8, wherein the conductive elements are located on the distal side of the dielectric elements.
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10. A light-emitting panel as claimed in any of claims 3 to 7, wherein each conductive element is located at the surface of the transparent substrate in a gap between adjacent electroluminescent elements, and is completely enclosed by a dielectric element so that it does not contact an electroluminescent element.
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11. A light-emitting panel as claimed in any preceding claim, wherein the electroluminescent elements emit light of different colours.
- 25 12. A light-emitting panel as claimed in claim 11, comprising a transparent substrate, a first array of electroluminescent elements arranged to emit light of a first colour, and a second array of electroluminescent elements arranged to emit light of a second colour.

13. A light-emitting panel comprising a first array of electroluminescent elements arranged to emit light of a first colour, and a second array of electroluminescent elements arranged to emit light of a second colour.

5 14. A light-emitting panel as claimed in claim 12 or 13, further comprising a third array of electroluminescent elements arranged to emit light of a third colour.

10 15. A light-emitting panel as claimed in claim 12, 13 or 14, arranged so that the electroluminescent elements in different arrays are activatable simultaneously so that the panel appears to emit light of a colour made up of a combination of the colours emitted by the different arrays.

15 16. A light-emitting panel as claimed in claim 15, wherein the intensity of light emitted by different arrays is variable so that the apparent shade of light emitted by the panel is variable in response to a change in the intensity of light emitted by one or more of the arrays relative to the light emitted by the other array(s).

20 17. A light-emitting panel as claimed in any preceding claim, further comprising a diffuser layer.

18. A light-emitting panel as claimed in any preceding claim, further comprising a transparent layer arranged on the opposite side of the panel to the transparent substrate.

25 19. A light-emitting panel as claimed in claim 18, arranged to emit light through the transparent layer and the transparent substrate.

20. A light-emitting panel as claimed in any preceding claim, comprising a plurality of selectively actuatable arrays of electroluminescent elements, so that different shapes can be illuminated by activating different arrays.

21. A light-emitting panel as claimed in claim 20, wherein the arrays are at least partially superimposed on one another.
22. A light-emitting panel as claimed in claim 1, wherein the electrical supply means comprises a plurality of dielectric elements located between every other pair of electroluminescent elements, each dielectric element in contact with a conductive element, and a conductive element located in each gap between adjacent electroluminescent elements not occupied by a dielectric element.
- 10 23. A light-emitting panel, comprising:
a transparent substrate;
a plurality of electroluminescent elements on the surface of the transparent substrate;
a plurality of dielectric elements located between the electroluminescent
15 elements; and
a plurality of conductive elements in contact with the dielectric elements,
arranged so that a voltage can be applied across each of the plurality of
electroluminescent elements.
- 20 24. A light-emitting panel as claimed in any preceding claim, wherein the transparent substrate is a curved surface.
- 25 25. A light-emitting panel as claimed in claim 22, wherein the curved surface is a cylindrical surface.
26. A sign panel, comprising:
a light-emitting panel as claimed in any preceding claim; and
a transparent, retroreflective layer arranged on the opposite side of the
transparent substrate to the electroluminescent elements.

27. A sign panel as claimed in claim 26, further comprising a photoresistor on the surface of the transparent substrate for detecting the level of ambient light falling on the panel.

- 5 28. A method of manufacturing a light-emitting panel, comprising:
depositing a plurality of electroluminescent elements on a transparent substrate;
depositing a plurality of dielectric elements on the substrate in the gaps between
the electroluminescent elements so that the dielectric elements extend further away from
the substrate than the electroluminescent elements; and
10 depositing a conductive element on the top of each dielectric element.

29. A method of emitting light from a light-emitting panel as claimed in claim 3,
comprising:

- 15 supplying an alternating voltage to alternate conductive elements so that each
electroluminescent element is provided with an alternating voltage across it and emits
light.

30. A method of emitting light from a light-emitting panel as claimed in claim 3,
comprising:

- 20 supplying an alternating voltage to adjacent pairs of conductive elements so as
to activate a first set of alternate electroluminescent elements to emit light.

- 25 31. A method as claimed in claim 30, further comprising altering the adjacent pairs
of conductive elements to which the alternating voltage is supplied so as to activate a
second set of alternate electroluminescent elements to emit light.